### **REMARKS**

Applicants have now had an opportunity to carefully consider the Examiner's comments set forth in the Office Action of 4/24/2009. Claims 3, 9-20, and 22-24 have been amended and are submitted for further consideration. Claims 4-7, 21, and 25-26 have been resubmitted with no change. Claims 1-2 and 8 have been cancelled. Reconsideration of the Application is requested.

# I. INTERVIEW SUMMARY

Applicant notes the telephonic interview conducted with Applicant's attorney Mark Svat and the Examiner on June 29, 2009, in which the differences between Heckerman et al (U.S. 6,742,003 B2) and the current disclosure were discussed. An Interview Summary dated July 1, 2009 was mailed by the Examiner and received by the Applicants. Applicant argued that the cited reference fails to teach a top-down process of creating a hierarchy, wherein nodes are successively split to generate a hierarchy. The Interview Summary states that "the cited reference teaches a method for creating a hierarch[y] from a base category, and use the user input to create the hierarchical Applicant argues the cited reference teaches a method for creating a structure." hierarchy wherein the plurality of base categories are determined, then successively combined to create a hierarchy, then after the hierarchy is created, a user may manually split a combined node back into its base categories. The user does not create the hierarchy; the user merely modifies the created hierarchy. The Examiner requested that a written response be submitted including arguments and remarks with respect to the shortcomings of the cited reference for consideration by the Examiner, to which the Applicants agreed, whereby this response is being filed.

# II. REJECTIONS UNDER 35 U.S.C. § 101

Claims 10-12 and 15-19 were rejected under 35 U.S.C. § 101 because the claimed invention was aimed to non-statutory subject matter. To qualify as a statutory process under § 101, the Office Action states "the claim should positively recite the

other statutory class (the thing or product) to which it is tied, by identifying the apparatus that accomplishes the method steps."

Applicants have amended claims 10-12, 15-19 to reflect statutory subject matter. The claims reflect a computer program product which includes a method to be performed by a computer. The computer is the "statutory class (the thing or product) to which it is tied"; the computer is "the apparatus that accomplishes the method steps." Therefore, applicants respectfully submit claims 10, 12 and 15 and claims 11 and 16-19 which depend therefrom reflect statutory subject matter and are statutory.

### III. REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-9 and 20-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Heckerman et al (U.S. 6,742,003 B2) in view of Fohn et al (U.S. 6,460,025 B1).

Claims 10-19 and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Heckerman et al (U.S 6,742,003 B2) in view of Fohn et al (U.S. 6,460,025 B1), and in further view of Chickering (U.S. 6,556,958 B1).

Turning first to claims 1-9 and 20-25 rejected over Heckerman in view of Fohn, Applicants have cancelled claims 1-2 and 8 and have amended claims 3, 9, 20, and 22-24 to reflect a top-down approach to the hierarchy creation. Heckerman states in column 7 lines 53-55 that "[t]o form the hierarchy, the CV system starts with the base categories and combines the two base categories that are most similar to form a combined category." (Emphasis added.) See also Fig 11; col. 10, lines 48-52; col. 20, lines 32-40; and claims 1-2 and 19 in Heckerman. This is a bottom-up approach, where the hierarchy determination starts at the leaves and combines those leaves until it reaches a singular node at the top. Any mention of splitting a node in Heckerman is performed by the instruction of a user and only after the initial hierarchy is generated as specified at col. 7, lines 34-37; col. 10, lines 5-26; and col. 10, lines 52-57. Thus, a node is never split during the initial hierarchy creation, and the splitting merely reverses the automatic combination of the two categories, so the net result of a user split is zero. This approach is contradictory to the approach of the amended claims. The amended claims reflect a top-down approach, which starts with a single node, then successively

splits that node until a hierarchy is formed that accommodates all of the (document, word) fragments. This top-down approach is mentioned in the specification in ¶¶ 5 and 16 and is currently reflected in the amended claims. Applicants respectfully submit that Heckerman is no longer reflected in the claims so any rejection considering a combination requiring Heckerman is no longer applicable.

With continued attention to claims 1-9 and 20-25, the Office Action states on page 4 that "Heckerman mentions that the document has n attributes (col. 27, line 67), and based on the matches or those attribute settings, a document can belong to multiple clusters in the hierarchical tree and therefore, forming a multi level hierarchical organizations (col. 5, lines 21-28 of Heckerman)." Applicants respectfully submit that the reference cited does not include any information about documents belonging to multiple clusters.

Claims 4-7, 21, and 25 are dependent on the independent claims 3, 20 and dependent claim 24. As noted above, claims 3, 20, 24 have been amended to be distinguished from the teachings of Heckerman. The claims 4-7, 21 and 25 will therefore by association with the amended claims, no longer reflect Heckerman. Applicants respectfully submit that Heckerman is no longer reflected in the claims so any rejection considering a combination requiring Heckerman is no longer applicable.

Next, turning to Claims 10-19 and 26, rejected over Heckerman in view of Fohn and Chickering, Applicants have amended claims 13-15 to reflect the top-down approach as mentioned above. Applicants submit that claims 10 and 12 already reflect the top-down approach with reference to "ancestor" and "descendant" nodes, therefore claims 10, 12 and claim 11, which is dependent on claim 10, have been submitted without amendment regarding reference to Heckerman, although they have been amended due to statutory subject matter as mentioned above. Claims 16-19 are dependent on amended claim 15, so are submitted in their original forms, reflecting the amendments to claim 15. Claim 26 is dependent on claim 25, and is submitted in its original form. Applicants respectfully submit that Heckerman is no longer reflected in the claims so any rejection considering a combination requiring Heckerman is no longer applicable.

## CONCLUSION

For the reasons detailed above, it is submitted all remaining claims (Claims 3-7, 9-26) are now in condition for allowance.

Remaining Claims, as delineated below:

7-21-09

| (1) For            | (2) CLAIMS REMAINING AFTER AMENDMENT LESS HIGHEST NUMBER |        | (3) NUMBER EXTRA |
|--------------------|--|--------|------------------|
|                    | PREVIOUSLY PAID FOR                                      |        |                  |
| TOTAL CLAIMS       | 23   | - 26 = | 0                |
| INDEPENDENT CLAIMS | 10   | - 10 = | 0                |

This is an authorization under 37 CFR 1.136(a)(3) to treat any concurrent or future reply, requiring a petition for extension of time, as incorporating a petition for the appropriate extension of time.

The Commissioner is hereby authorized to charge any filing or prosecution fees which may be required, under 37 CFR 1.16, 1.17, and 1.21 (but not 1.18), or to credit any overpayment, to Deposit Account 24-0037.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call Mark S. Svat, at Telephone Number (216) 363-9000.

Respectfully submitted,

**FAY SHARPE LLP** 

Mark S.√Svat, Reg. No. 34,261

The Halle Building - Fifth Floor

1228 Euclid Avenue Cleveland, OH 44115

216-363-9000

20